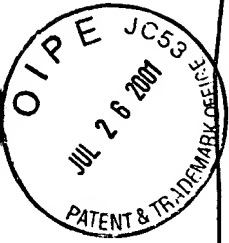


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Applicant(s): Christopher J. de Simone, Lucian M. Hand, Gi Jeong Kim, Seung Mo Kim, Jin An Lee

Assignee: Amkor and ANAM (Jointly)

Title: Nonexposed Heat Sink For Semiconductor Package

Serial No.: 09/513,067

Filing Date: February 24, 2000

Examiner: Chuong A. Luu

Group Art Unit: 2825

Docket No.: AB-928 US

#9/a  
8/16/01  
V. Vannan

RECEIVED  
JUL 26 2001  
2800 MAIL ROOM

San Jose, California  
July 26, 2001

COMMISSIONER FOR PATENTS  
Washington, D. C. 20231

See page 6, lines 21-26.

RESPONSE TO OFFICE ACTION

Dear Sir:

In response to the Office Action mailed May 9, 2001, Applicants submit the following amendments and remarks.

09/513,067 05/09/01

IN THE SPECIFICATION

Please amend the specification by replacing various paragraphs, as indicated below. In accordance with 37 CFR § 1.121(b)(1)(iii), Attachment A contains marked up versions of the replacement paragraphs illustrating the newly introduced changes in the specification.

Please replace the paragraph starting on page 1, line 22, with the following replacement paragraph.

Fig. 1 is a cross-sectional view of a conventional semiconductor package 1'. Package 1' includes a semiconductor chip 2 that is attached to a planar upper surface 5a of a heat sink 5' using adhesive 6. Heat sink 5' has a relatively large thickness (e.g., 1 to 3 mm) and may be formed of copper, aluminum, or other materials. A plurality of metal leads 7' surround semiconductor chip 2. Leads 7' are about 0.12 mm to 0.15 mm thick, and thus are much thinner than heat sink 5'. Each lead 7' comprises an encapsulated inner lead 11' and a

AL-  
CRA  
LAW OFFICES OF  
SKYERVEN MORRILL  
MACPHERSON LLP  
25 METRO DRIVE  
SUITE 700  
SAN JOSE, CA 95110  
(408) 453-9200  
FAX (408) 453-7979